MARISSEN et al U.S. National Phase of PCT/NL2004/000254

AMENDMENTS TO THE ABSTRACT

Please insert the Abstract of the Disclosure which is on the attached sheet.

ABSTRACT OF THE DISCLOSURE

The present invention relates to a method for the production of an isotropic polymeric network comprising multifunctional molecules with a functionality of at least 5 by reacting in a solvent the multifunctional molecules with a coupling agent, wherein the coupling agent is present in an amount which is sufficient to couple the multifunctional molecules to at least 5 other multifunctional molecules and wherein the sum, p, of the amounts of the multifunctional molecules and coupling agent per unit of volume, in kg/m^3 , is at least equal to the value as given by expression (I) in which a=0.2 d = the diameter of the multifunctional molecule, including the length of the bonds to the middle of atoms of the coupling agent to which it is attached. L = the length of the coupling agent, measured between the middle of the atoms that are connected to the multifunctional molecule. m_1 = the molecular mass of the multifunctional molecule as present in the isotropic 20 polymeric network m_2 = the molecular mass of the coupling agent as present in the isotropic polymeric network n = the functionality of themultifunctional molecule (n \geq 5). The invention furthermore relates to an isotropic polymeric network with a density lower than 1000 kg/m³ and a specific Young's modulus of at least 0.01 GPa.m³/kg, shaped articles hereof and the use of the isotropic polymeric network as construction material.